



NOVEMBER  
**02**  
2015  
Irchel  
Campus  
Y16 G15  
4:00 pm



SCHRÖDINGER

# COLLOQUIUM

SERIES

[www.physik.uzh.ch/schroedinger](http://www.physik.uzh.ch/schroedinger)

## PROF. JOSEPH SILK IAP, CEA, JHU, BIPAC The Limits of Cosmology

One of our greatest challenges is understanding the origin of the structure of the universe. I will describe how the fossil radiation from the beginning of the universe, the cosmic microwave background, has provided a window for probing the initial conditions from which structure evolved. Infinitesimal variations in temperature on the sky provide the fossil fluctuations that seeded the formation of the galaxies.

The cosmic microwave background radiation has now been mapped with ground-based, balloon-borne and satellite telescopes. These provide the basis for our current “precision cosmology” in which the universe not only contains Dark Matter but also “Dark Energy”, which has accelerated its expansion exponentially in the last 4 billion years. I will describe the current status and future challenges.

